DETAILED ACTION

Claim Rejections - 35 USC § 102

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

1. Claims 5-7, 10-13, 16 and 17 are rejected under 35 U.S.C. 102(b) as being anticipated by Meyer et al (5,015,229).

a. Regarding claim 5, Meyer discloses a reservoir of a liquid suspension 43. The syringe is then activated (figure 3 to figure 4) utilizing the second chamber 45 thereby increasing the initial reservoir volume and dissolving a solid 46. The button is continually pressed such that the volume of the reservoir will be reduced to its initial volume. Further pressure on the reservoir will result in the fluid being dispensed from the reservoir. Meyers also discloses that the first reservoir has slightly compressed air 31 (Col.3 lines 61-63) meaning the pressure in the first reservoir is slightly above atmospheric. As discussed in the first office action increasing the volume (figure 3 to figure 4) of a closed, non-reactive system will result in a proportional drop in pressure (Ideal gas law). Therefore, from figures 3 and 4 it is discernable that the volume increases by over a half, therefore the pressure will drop by over a half, reducing the pressure below atmospheric.

b. Regarding claim 6, fluid flows from reservoir one to reservoir two, flow is caused by pressure differentials, therefore, a partial vacuum (relative to the other reservoir) would have been created.

c. Regarding claims 7 and 8, A piston member 42 is engageable in the reservoir and the vacuum is created by withdrawing the reservoir from the thinner, first reservoir (Figures 10 to 11)

d. Regarding claim 10, The contents of the reservoir are capable of being dispensed in a single dose.

e. Regarding claim 11, As can be seen in figure 3, the reservoir is integrally formed with the delivery system as it is necessary to the completeness of the device. (American Heritage Dictionary)

f. Regarding claim 12, The contents of the reservoir are capable of being dispensed via a number of different doses.

g. Regarding claim 13, see claim 11 above.

h. Regarding claims 16 and 17, the device of Meyer is capable of being used nasaly or orally.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

2. Claims 1-4, 8, 9, 14, 15, 18, 20 and 21 are rejected under 35 U.S.C. 103(a) as being unpatentable over Meyer et al (5,015,229) as applied to claims 5, 7 or 12 above, and further in view of Haber et al (5,211,285).

i. Regarding claim 1 and 18, Meyer discloses a reservoir of a liquid suspension 43. The syringe is then activated (figure 3 to figure 4) utilizing the second chamber 45 thereby increasing the initial reservoir volume and dissolving a solid 46. The button is continually pressed such that the volume of the reservoir will be reduced to its initial volume. Further pressure on the reservoir will result in the fluid being dispensed from the reservoir. Meyers also discloses that the first reservoir has slightly compressed air 31 (Col.3 lines 61-63) meaning the pressure in the first reservoir is slightly above atmospheric. As discussed in the first office action increasing the volume (figure 3 to figure 4) of a closed, non-reactive system will result in a proportional drop in pressure (Ideal gas law). Therefore, from figures 3 and 4 it is discernable that the volume increases by over a half, therefore the pressure will drop by over a half, reducing the pressure below atmospheric. While Meyer substantially discloses the method as claimed, it does not disclose agitating the liquid suspension. However, Haber discloses a syringe that solids and liquids being mixed with agitation (figures 1 and 2) to better suspend/dissolve the solid. Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the method of Meyer to agitate the liquid suspension to better dissolve/suspend the solid.

j. Regarding claim 2, fluid flows from reservoir one to reservoir two, flow is caused by pressure differentials, therefore, a partial vacuum (relative to the other reservoir) would have been created.

k. Regarding claim 3, A piston member 42 is engageable in the reservoir and the vacuum is created by withdrawing the reservoir from the thinner, first reservoir (Figures 10 to 11)

l. Regarding claims 4, 20 and 21, As noted in claim 1, the pressure is slightly above atmospheric in reservoir one before use. However, even though the pressure is above atmospheric, no flow is occurring. Therefore, the reservoir would have to be pressurized even further above atmospheric to dispense the fluid.

m. Regarding claims 14 and 15, While Meyer substantially discloses the apparatus as claimed, it does not disclose the reservoir as being a replaceable vial, ampoule or similar cartridge. However, Haber discloses a vial system in figure 1 that is a closed system and replaceable with respect to the remainder of the dispensing apparatus. It also allows the cartridge to be used with a conventional syringe or a fountain pen assembly which allows the device to be readily accessible yet eliminates the stigma of abnormality (Col.2 line 18-24). Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the device of Meyer et al to make the reservoir a replaceable cartridge as taught by Haber so that it may be used with a variety of dispensers, such as a fountain pen assembly to eliminate the stigma of the user appearing abnormal.

Response to Arguments

3. Applicant's arguments, see Applicant Arguments/Remarks, filed 7/8/2008, with respect to the rejection(s) of claim(s) 1 and 5 under Haber have been fully considered and are persuasive. Therefore, the rejection has been withdrawn. However, upon further consideration, a new ground(s) of rejection is made in view of Meyer and Haber.

Conclusion

Any inquiry concerning this communication or earlier communications from the examiner should be directed to BRADLEY J. OSINSKI whose telephone number is (571)270-3640. The examiner can normally be reached on M-Th 8AM-5PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Kevin Sirmons can be reached on (571)272-4965. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

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